IN THE CLAIMS

1. (**currently amended**) A composition **for isolating DNA from plant tissue** comprising a mixture of cell wall degrading enzymes **isolated from a TW-1 mutant strain of *Trichoderma longibrachiatum***.

2. (original) The composition of claim 1, wherein said enzymes of said composition are produced recombinantly.

3-6. (**canceled**)

7. (**currently amended**) The composition of claim 1, wherein said enzymes comprise **a carbohydrase** ~~**carbohydrases**~~.

8. (**currently amended**) The composition of claim 1, wherein said mixture comprises **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~**cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases**~~.

9. (**currently amended**) The composition of claim 1, wherein said mixture comprises at least one of ~~**the**~~ **an enzyme** ~~**enzymes**~~ selected from the group consisting of **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~**cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases**~~.

10. (original) The composition of claim 1 further comprising a digestion buffer comprising a DNA preserving agent.

11. (original) The composition of claim 10, wherein said DNA preserving agent is EDTA.

12. (original) The composition of claim 10, wherein said digestion buffer further comprises at least one of a non-ionic detergent and PEG.

13. (original) The composition of claim 12 wherein said detergent is Triton-X-100.

14. (original) The composition of claim 10, wherein said digestion buffer has a pH of 5.0.

15. (**currently amended**) A method for isolating DNA from plant tissue comprising:

combining a sample of plant tissue with a mixture of cell wall degrading enzymes **isolated from a TW-1 mutant strain of *Trichoderma longibrachiatum***, and

incubating said plant tissue and said mixture of cell wall degrading enzymes.

16. (original) The method of claim 15, wherein said enzymes of said mixture are produced recombinantly.

17-20. (**canceled**)

21. (**currently amended**) The method of claim 15, wherein said enzymes comprise **a carbohydrase** ~~**carbohydrases**~~.

22. (**currently amended**) The method of claim 15, wherein said mixture comprises **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~**cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases**~~.

23. (**currently amended**) The method of claim 15, wherein said mixture comprises at least one of **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~**cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases**~~.

24. (original) The method of claim 15, wherein said incubation is performed in the presence of a digestion buffer comprising a DNA preserving agent.

25 (original) The method of claim 24, wherein said DNA preserving agent is EDTA.

26. (original) The method of claim 24 wherein said digestion buffer further comprises at least one of a non-ionic detergent and PEG.

27. (original) The method of claim 26, wherein said detergent is Triton-X-100.

28. (original) The method of claim 24, wherein said buffer has a pH of 5.0.

29. (original) The method of claim 15, wherein said incubation is performed at 50°C.

30. (original) The method of claim 15, wherein said combination of said mixture of cell wall degrading enzymes and said sample are agitated at 250 rpm for 1-16 hours.

31. (original) The method of claim 15, further comprising the steps of adding a DNA-binding solid support and binding said DNA to said solid support after said incubation step.

32. (original) The method of claim 15, wherein said method is automated.

33. (**currently amended**) A kit for isolating DNA from plant tissue comprising a mixture of cell wall degrading enzymes **isolated from a TW-1 mutant strain of *Trichoderma longibrachiatum*** and packaging means thereof.

34. (original) The kit of claim 33, wherein said enzymes of said mixture are prepared recombinantly.

35-38. (**canceled**)

39. (**currently amended**) The kit of claim 33, wherein said enzymes comprise **a carbohydrase** ~~carbohydrases~~.

40. (**currently amended**) The kit of claim 33, wherein said mixture comprises **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases~~.

41. (**currently amended**) The kit of claim 33, wherein said mixture comprises at least one of **a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase** ~~cellulases, β-glucanases, mannanases, xyloglucanases, pectinases, glycosidases and xylanases~~.

42. (original) The kit of claim 33, further comprising a digestion buffer comprising a DNA preserving agent.

43. (original) The kit of claim 42, wherein said DNA preserving agent is EDTA.

44. (original) The kit of claim 42 wherein said digestion buffer further comprises at least one of a non-ionic detergent and PEG.

45. (original) The kit of claim 44, wherein said detergent is Triton-X-100.

46. (original) The kit of claim 42, wherein said digestion buffer has a pH of 5.0.

47. (original) The kit of claim 33, further comprising a DNA-binding solid support.

48. (new) The composition of claim 1, wherein the mixture comprises a cellulase, β-glucanase, a xylanase, a mannanase, a xyloglucanase, a pectinase, a β-glucosidase, a β-xylosidase, an α-L-arabinofuranosidase, and an α-galactosidase; and wherein the mixture has: cellulase activity of 250 to 50,000 U/ml; β-glucanase activity of 240 to 48,000 U/mL; xylanase activity of 40 to 18,000 U/mL; mannanase activity of 5 to 1000 U/mL;

xyloglucanase acitivity of 25 to 5000 U/mL; pectinase activity of 15 to 3000 U/mL; β-glucosidase activity of 2.5 to 500 U/mL; β-xylosidase activity of 0.5 to 100 U/mL; α-L-arabinofuranosidase activity of 2.5 to 500 U/mL; and α-galactosidase acivity of 0.5 to 100 U/mL.

49. (new) The composition of claim 48, wherein the mixture has: cellulase activity of 2500 to 5000 U/ml; β-glucanase activity of 2400 to 4800 U/mL; xylanase activity of 400 to 1800 U/mL; mannanase activity of 50 to 100 U/mL; xyloglucanase acitivity of 250 to 500 U/mL; pectinase activity of 150 to 300 U/mL; β-glucosidase activity of 25 to 50 U/mL; β-xylosidase activity of 5 to 10 U/mL; α-L-arabinofuranosidase activity of 25 to 50 U/mL; and α-galactosidase acivity of 5 to 10 U/mL.

50. (new) The method of claim 15, wherein the mixture comprises a cellulase, β-glucanase, a xylanase, a mannanase, a xyloglucanase, a pectinase, a β-glucosidase, a β-xylosidase, an α-L-arabinofuranosidase, and an α-galactosidase; and wherein the mixture has: cellulase activity of 250 to 50,000 U/ml; β-glucanase activity of 240 to 48,000 U/mL; xylanase activity of 40 to 18,000 U/mL; mannanase activity of 5 to 1000 U/mL; xyloglucanase acitivity of 25 to 5000 U/mL; pectinase activity of 15 to 3000 U/mL; β-glucosidase activity of 2.5 to 500 U/mL; β-xylosidase activity of 0.5 to 100 U/mL; α-L-arabinofuranosidase activity of 2.5 to 500 U/mL; and α-galactosidase acivity of 0.5 to 100 U/mL.

51. (new) The method of claim 50, whewherein the mixture has: cellulase activity of 2500 to 5000 U/ml; β-glucanase activity of 2400 to 4800 U/mL; xylanase activity of 400 to 1800 U/mL; mannanase activity of 50 to 100 U/mL; xyloglucanase acitivity of 250 to 500 U/mL; pectinase activity of 150 to 300 U/mL; β-glucosidase activity of 25 to 50 U/mL; β-xylosidase activity of 5 to 10 U/mL; α-L-arabinofuranosidase activity of 25 to 50 U/mL; and α-galactosidase acivity of 5 to 10 U/mL.

52. (new) The kit of claim 33, wherein the mixture comprises a cellulase, β-glucanase, a xylanase, a mannanase, a xyloglucanase, a pectinase, a β-glucosidase, a β-xylosidase, an α-L-arabinofuranosidase, and an α-galactosidase; and wherein the mixture has: cellulase activity of 250 to 50,000 U/ml; β-glucanase activity of 240 to 48,000 U/mL; xylanase activity of 40 to 18,000 U/mL; mannanase activity of 5 to 1000 U/mL; xyloglucanase acitivity of 25 to 5000 U/mL; pectinase activity of 15 to 3000 U/mL; β-

glucosidase activity of 2.5 to 500 U/mL; β-xylosidase activity of 0.5 to 100 U/mL; α-L-arabinofuranosidase activity of 2.5 to 500 U/mL; and α-galactosidase acivity of 0.5 to 100 U/mL.

53. (new) The kit of claim 52, wherein the mixture has: cellulase activity of 2500 to 5000 U/ml; β-glucanase activity of 2400 to 4800 U/mL; xylanase activity of 400 to 1800 U/mL; mannanase activity of 50 to 100 U/mL; xyloglucanase acitivity of 250 to 500 U/mL; pectinase activity of 150 to 300 U/mL; β-glucosidase activity of 25 to 50 U/mL; β-xylosidase activity of 5 to 10 U/mL; α-L-arabinofuranosidase activity of 25 to 50 U/mL; and α-galactosidase acivity of 5 to 10 U/mL.